

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

)	Confirmation No. 9289
)	Group Art Unit: 1652
)	Examiner: W. Moore
)	
	) ) ) ) ) )

For: RECOMBINANT HEXOSE OXIDASE: A METHOD OF PRODUCING SAME

AND USE OF SUCH ENZYME

## COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Applicants gratefully acknowledge the Notice of Allowance mailed to Applicant's representative on May 19, 2004 for the captioned matter. In response to that Notice of Allowance and the accompanying Examiner's Amendment containing the Examiner's Statement of Reasons for Allowance, Applicants provide the following comments for the record, along with the payment of the Issue Fee.

Applicants wish to take this opportunity to clarify for the record that the expression "Chondrus crispus hexose oxidase," as recited in several of the present claims, is not intended as a source limitation for the recited hexose oxidase. In particular, the recited hexose oxidase (or DNA encoding the recited hexose oxidase) of the present invention need not be in any way derived or extracted from Chondrus crispus. Further, the claimed hexose oxidase (or DNA encoding same) need not even have the same structure (e.g., amino acid/nucleotide sequence) as that of a hexose oxidase derived or extracted from Chondrus crispus.

Instead, the expression "Chondrus crispus hexose oxidase" is intended merely as a functional limitation. In particular, the expression is only intended to limit the hexose oxidase of the invention to a hexose oxidase having the "activity of" a hexose oxidase from Chondrus crispus.

The foregoing is well supported by the record and is consistent with the underlying purpose of the present invention, namely to provide a recombinantly prepared compound having the hexose oxidase activity of a hexose oxidase from *Chondrus crispus*. In particular, it is clear from the record that Applicants were the first to recombinantly prepare a hexose oxidase having the activity of a hexose oxidase from *Chondrus crispus*. Further, the application clearly provides enablement and adequate written description for a hexose oxidase that meets both this functional limitation and the structural limitation concerning the specifically "internal peptide sequences" that are recited in the claim. There is nothing in the record to suggest that it would be necessary to limit the claimed hexose oxidase (or sequence encoding same) to either a hexose oxidase (or sequence encoding same) from a specific source or one having the same structure as a hexose oxidase from that specific source.

In view of the foregoing, it is clear that the claims are not limited to a hexose oxidase derived from *Chondrus crispus* or a hexose oxidase having the same structure as a hexose oxidase from *Chondrus crispus*. The only structural limitation of the claimed compounds of the present invention is the requirement for the presence of the sequence fragments that are specifically recited in the claims (e.g., the "internal peptide sequences"). The recitation of "*Chondrus crispus* hexose oxidase" is merely present in the claims to provide and clarify the additional *functional* limitation for the requisite hexose oxidase activity of the presently claimed compounds. Accordingly, it is readily apparent that any hexose oxidase having the activity of a hexose oxidase of *Chondrus crispus* is within the scope of the claims, subject to the structural limitation regarding the internal peptide sequences.

Applicants respectfully request that these Comments on Statement of Reasons for Allowance be entered into the record of the present application. In the event any fees are incurred upon the filing of these documents, please charge the undersigned's Deposit Account No. 50-0206.

Respectfully submitted,

**HUNTON & WILLIAMS** 

Date: <u>August 18, 2004</u> By

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